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(72) Inventors; and

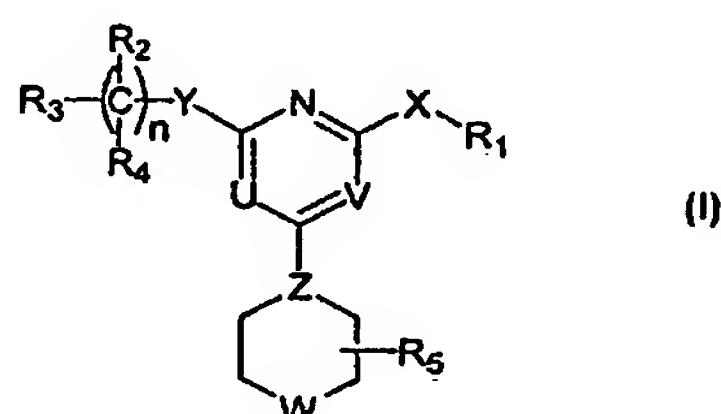
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(54) Title: HETEROCYCLIC COMPOUNDS FOR PREVENTING AND TREATING DISORDERS ASSOCIATED WITH EXCESSIVE BONE LOSS



(I)

(57) Abstract: This invention relates to pyrimidine compounds of formula (I), formula (I') and formula (I''): formula (I) and pharmaceutically acceptable salts, solvates, clathrates, and prodrugs thereof, wherein R₁, R₂, R₃, R₄, R₅, U, V, W, X, Y, Z, and n are defined herein. This invention also relates to compositions comprising these compounds and methods for using them. The compounds and compositions of this invention are useful to treat or prevent disorders associated with excessive bone loss, including, without limitation periodontal disease, non-malignant bone disorders (such as osteoporosis, Paget's disease of bone, osteogenesis imperfecta, fibrous dysplasia, and primary hyperparathyroidism) estrogen deficiency, inflammatory bone loss, bone malignancy, arthritis, osteopetrosis, and certain cancer-related disorders (such as hypercalcemia of malignancy (HCM), osteolytic bone lesions of multiple myeloma and osteolytic bone metastases of breast cancer and other metastatic cancers).

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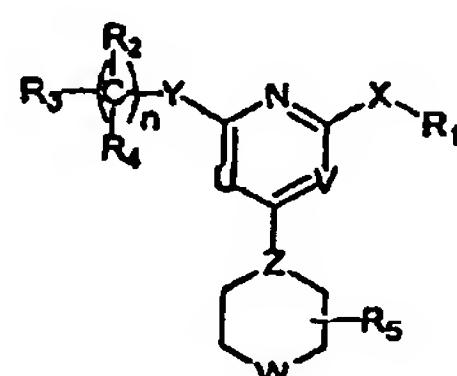
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